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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,628	07/29/2003	David P. Dumas	66788-036	9067

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EXAMINER	
NOGUEROLA, ALEXANDER STEPHAN	
ART UNIT	**PAPER NUMBER**
1753	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/630,628	DUMAS, DAVID P.	
	Examiner	Art Unit	
	ALEX NOGUEROLA	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *7-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-6 in the reply filed on October 26, 2006 is acknowledged. It will be noted though that the status of claims 7-28 has not been changed to "withdrawn."

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In *re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of U.S. Patent No. 6,911,339 in view of DeVoe et al. US 2003/0127329 A1 ("DeVoe"). Claim 31 of U.S. Patent No. 6,911,339 meets all of the limitations of claim 1 of the instant application except for indicating whether the microfluidic device is an electrokinetic device. As a first matter, barring a contrary showing, such as a requirement of electrodes affixed to the device, whether the deice is an electrokinetic device is just an intended use that does not further structurally limit the deice of claim 1, especially since the deice of claim 31 has one or more microchannels and one or more wells. In any event, it would have been obvious to one with ordinary skill in the art at the time of the invention to make the deice of claim 31 into an electrokinetic device because as taught by DeVoe configuring the device for electroosmotic flow (a type of electrokinetic flow) is a simple and elegant way to provide flow control that is easy to fabricate, simple to implement, does not require moving parts, and results in plug-like velocity profiles. See [0003].

4. Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of U.S. Patent No. 6,911,339 in view of DeVoe et al. US 2003/0127329 A1 ("DeVoe"). Claim 1, from which claim 2 depends, has been addressed above. Claim 2 is obvious because DeVoe states, "In general,

EOF describes a particular form of bulk fluid motion within a capillary which occurs, for example, during capillary electrophoresis" and "Application of field-effect flow control for manipulating the velocity of EOF in capillary electrophoresis has been demonstrated by several groups." See [0005] and [0006].

5. Claim 3 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 36 of U.S. Patent No. 6,911,339 in view of DeVoe et al. US 2003/0127329 A1 ("DeVoe"). Claim 1, from which claim 3 depends, has been addressed above. Claim 36 of U.S. Patent No. 6,911,339 meets the additional limitations of claim 3.

6. Claim 4 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of U.S. Patent No. 6,911,339 in view of DeVoe et al. US 2003/0127329 A1 ("DeVoe"). Claim 1, from which claim 4 depends, has been addressed above. Claim 4 is obvious because it only adds a product-by-process limitation that does not result in structurally or compositionally different device than that claimed by claim 31 of U.S. Patent No. 6,911,339 in view of DeVoe. Furthermore, claim 4 of U.S. Patent No. 6,911,339 requires the polymer to be generated by polymerizing a prepolymer of polyol (allyl carbonate).

7. Claim 6 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 34 of U.S. Patent No. 6,911,339 in view of DeVoe et al. US 2003/0127329 A1 ("DeVoe"). Claim 1, from which claim 6 depends, has been addressed above. Claim 34 of U.S. Patent No. 6,911,339 meets the additional limitations of claim 6.

Claim Rejections - 35 USC § 112

8. Claim 2 provides for the use of the electrokinetic device, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 2 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Allowable Subject Matter

9. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: claim 5 requires the chemical properties of the polyol (allyl carbonate) polymer to be modified by hydrolysis, which is not required by any of the claims in U.S. Patent No. 6,911,339. Although DeVoe discloses a polycarbonate substrate ([0027]), DeVoe does not disclose using particularly poly(allyl carbonate) nor modifying the polycarbonate by hydrolysis.

Soane et al. (US 6,413,400 B 1) and Webster et al. ("Batch Fabricated Electrophoresis Chips on Polycarbonate Substrates by Surface Micromachining," Journal of Capillary Electrophoresis and Microchip Technology (1999), 6(1 & 2), 19-25) each discloses polycarbonate electrophoresis devices with microchannels. However, neither discloses particularly poly(allyl carbonate) nor modifying the polycarbonate by hydrolysis.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (571) 272-1343. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NAM NGUYEN can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alex Noguerola
Primary Examiner
AU 1753
January 16, 2007